527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

527 CMR 8.00: TRANSPORTATION OF FLAMMABLE AND COMBUSTIBLE LIQUIDS

Section

- 8.01: Purpose and Scope
- 8.02: Definitions
- 8.03: Transportation of Flammable and Combustible Liquids
- 8.04: Permits
- 8.05: Marking and Placarding of Cargo Tanks
- 8.06: Marking and Placarding of Portable Tanks
- 8.07: Cargo Tanks
- 8.08: Double Bulkheads
- 8.09: Accident Damage Protection
- 8.10: Closures For Manholes
- 8.11: Outlets
- 8.12: Static Protection
- 8.13: Lighting
- 8.14: Exhaust System
- 8.15: Fire Extinguishers
- 8.16: Auxiliary Internal Combustion Engines
- 8.17: Auxiliary Electric Generators and Motors
- 8.18: Filling and Discharging Tank Vehicles
- 8.19: Asphalt Tank Vehicles
- 8.20: Transportation by Transfer Tanks
- 8.21: General
- 8.22: Referenced Publications

8.01: Purpose and Scope

- (1) 527 CMR 8.00 shall apply to the transportation of combustible liquids, by Massachusetts registered motor vehicles, in cargo tanks, portable tanks and transfer tanks by transport vehicles, and flammable liquids in non-bulk packagings not exceeding seven gallons capacity. The intent of 527 CMR 8.00 is to protect the public safety and welfare from the danger of fire due to tank or container leakage of flammable or combustible liquids, and is in addition to any requirements of the U.S. Department of Transportation, (DOT) Title 49 CFR.
- (2) The transportation of flammable liquids shall be in accordance with U.S. Department of Transportation, (DOT) Title 49 CFR.
- (3) All cargo tanks, portable tanks, and transfer tanks, are to be considered full for the purpose of permitting required under 527 CMR 8.00.

8.02: Definitions

(1) For the purpose of 527 CMR 8.00, the following terms shall have the meanings respectively assigned to them:

Approved. Approved by the Marshal.

<u>Cargo Tank</u>. Any container having a liquid capacity of 119 gallons or more intended primarily for the carriage of flammable or combustible liquids, including appurtenances, reinforcements, fittings, and closures and which:

- (a) is permanently attached to or forms a part of a motor vehicle, or is not permanently attached to a motor vehicle but which by reason of its size, construction or attachment to a motor vehicle is loaded or unloaded without being removed from the motor vehicle; and
- (b) is not fabricated under a DOT specification for portable tanks; and
- (c) does not solely supply fuel for the propulsion of the transport vehicle upon which it is mounted.

<u>Combustible Liquid</u>. Any liquid having a flash point at or above 100°F shall be known as a Class II or Class III Liquid. Combustible liquids shall be divided into the following classifications:

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.02: continued

Class II: Liquids having flash points at or above 100°F and below 140°F. Class IIIA: Liquids having a flash point at or above 140°F and below 200°F.

Class IIIB: Liquids having a flash point at or above 200°F.

Compartment. A liquid-tight division of a cargo tank.

<u>Department</u>. Department of Fire Services or Department of State Police.

<u>Flammable Liquid</u>. Any liquid having a flash point below 100°F (38°C) and having a vapor pressure not exceeding 40 psia at 100°F.

Marshal. The State Fire Marshal.

Nationally Recognized Testing Laboratory (NRTL). An organization which tests for safety and lists, labels or accepts equipment or materials and which meets the criteria in 527 CMR 49.00: *Appendix C*

<u>Person</u>. Any person, firm or corporation.

<u>Portable Tank</u>. Any container designed primarily to be loaded onto, or on, or temporarily attached to a transport vehicle and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means.

<u>Tank Semi-Trailer</u>. Any vehicle, with or without auxiliary motive power, equipped with a cargo tank mounted thereon or built as an integral part thereof, and used for the transportation of flammable or combustible liquids, and so constructed that, when drawn by a tractor by means of a fifth wheel connection, some part of its load and weight rests upon the towing vehicle.

<u>Tank Truck</u>. Any single self-propelled motor vehicle equipped with a cargo tank mounted thereon, and used for the transportation of flammable or combustible liquids.

<u>Tank Vehicle</u>. Any tank truck or tractor and tank semi-trailer combination equipped with a cargo tank mounted thereon or built as an integral part thereof, used for the transportation of flammable or combustible liquids.

<u>Tractor</u>. A self-propelled motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn.

<u>Transfer Tank</u>. Any container having a liquid capacity of less than 119 gallons into which combustible liquids are loaded, and drawn out by means of a pump assembly.

<u>Transport Vehicle</u>. Any vehicle such as an automobile, van, truck, tractor or semi-trailer, or any combination thereof, propelled or drawn by mechanical power and used upon the highways in the transportation of passengers and property.

<u>Unattended</u>. Any transport vehicle parked without the driver present for more than four hours.

8.03: Transportation of Flammable and Combustible Liquids

- (1) No person shall transport by cargo tank or transport vehicle, any combustible liquid within the Commonwealth unless such liquid is transported in accordance with the requirements of 527 CMR 8.00. No person shall transport by cargo tank or transport vehicle, any flammable liquid unless such liquid is transported in accordance with U.S. DOT, Title 49 CFR.
- (2) Transport vehicles used in the transportation of flammable or combustible liquids as herein provided for shall be subject to inspection by any member of the Department, the head of the fire department or his designee.

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.03: continued

(3) No person shall deliver any flammable or combustible liquid by any vehicle, except to transfer to another vehicle, unless the person, firm, or corporation receiving such liquids exhibits a permit/license for the storage of such liquids.

8.04: Permits

- (1) No cargo tank, portable tank or transfer tank shall be used for the transportation of any combustible liquid unless that tank has been approved and a permit to transport combustible liquids issued therefore by the Marshal.
- (2) Application for approval of a cargo tank, portable tank or transfer tank shall be made to the Marshal on a form furnished by the Department giving such information in full as requested, containing the address of the permitted land in accordance with 527 CMR 8.04(5) where the vehicle is parked overnight or such other information as he may deem necessary. Upon satisfactory proof of assurance that the tank has been designed and mounted in accordance with 527 CMR 8.00, the head of the fire department in the city or town of where the vehicle is parked overnight shall issue a permit to transport combustible liquids.
- (3) The permit to transport provided in 527 CMR 8.04 shall serve as a permit to transport combustible liquids for a period not to exceed two years. All permits to transport shall expire on August 31, 1994, and each even numbered year thereafter.
- (4) Permits to transport shall consist of a decal to be affixed to the upper left quadrant of the cargo tank, portable or transfer tank and a valid form FP 44 PERMIT which shall be carried in the transport vehicle at all times.
- (5) No cargo tank, portable tank, or transfer tank, shall be unattended unless a permit has been obtained from the head of the fire department as provided by M.G.L. c. 148, §§ 10A and 23. All cargo tanks, portable tanks, and transfer tanks, for which a permit has been granted under 527 CMR 8.04 shall only be left unattended in an area remote from buildings of habitation, in such a manner as the head of the fire department may prescribe.
- (6) Tank vehicles transporting combustible liquids in specification containers in accordance with U.S. (DOT) Title 49 CFR for flammable liquids, shall be exempt from 527 CMR 8.04(1) through (4) provided a certificate of exemption has been obtained from the head of the fire department.
- (7) Application for a certificate of exemption shall be on a form furnished by the Department giving such information in full as requested, containing the address of the permitted land in accordance with 527 CMR 8.04(5) where the vehicle is parked overnight. The person making application for a certificate of exemption shall affirm the tank vehicle meets the specifications for transporting flammable liquids in accordance with U.S. DOT, Title 49 CFR. Upon receipt of an application and affirmation for certificate of exemption, the head of the fire department, in the city or town where the vehicle is parked overnight, shall issue said certificate.
- (8) Certificates of exemption shall be carried in the transport vehicle at all times and shall remain in effect provided the tank vehicle is maintained in accordance with U.S. DOT, Title 49 CFR, specification for transporting flammable liquids.

8.05: Marking and Placarding of Cargo Tanks

- (1) All cargo tanks transporting combustible liquids shall be marked on each side and each end with the United Nations (UN) hazardous material identification number specified for the material being transported.
 - (a) Except as provided in 527 CMR 8.05(3), identification numbers shall be displayed on orange panels $6\frac{1}{4}$ inches high by $15\frac{3}{4}$ inches wide with a 9/16 inch black outer border. The identification number shall be displayed in four-inch black Helvetica Medium numerals on the orange panel; or

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.05: continued

- (b) On plain white square-on-point display configurations having the same outside dimensions as a placard, located in association with the required placards. The identification number shall be displayed across the center area of the panel in 3½ inch black Alpine Gothic or Alternate Gothic No. 3 numerals four inches high and approximately 8½ inches wide and may be outlined with a solid or dotted line border. An identification number displayed on a square-on-point display configuration is not considered to be a placard.
- (2) For cargo tanks used to transport flammable and/or combustible liquid petroleum distillate fuels the hazardous material identification number of the flammable liquid may be used.
- (3) Every cargo tank used for the transportation of any combustible liquid, regardless of the quantity being transported, shall be conspicuously and legibly marked on each side and each end with a square-on-point red placard measuring 10¾ inches on each side, the outer ½ inch of which must be white, bearing the hazardous material identification number of the contents in 3½ inch black numerals on a white background four inches high, and the configuration of a flame, or the word "COMBUSTIBLE" in white letters and a white symbol in the configuration of a flame. The words "FUEL OIL" may be used in place of the word "COMBUSTIBLE" on those cargo tanks used exclusively for the transportation of fuel oil.
 - (a) If the words "FUELOIL" are used on a placard to identify the material being transported, the identification number need not be displayed.
 - (b) When an identification number is displayed on a placard the UN hazard class number for that material shall be displayed in the lower corner of each placard.
- (4) Each cargo tank which is required to be marked or placarded in accordance with 527 CMR 8.05 must remain marked and placarded when empty unless it is:
 - (a) Reloaded with a material not subject to 527 CMR 8.00; or
 - (b) Sufficiently cleaned of residue and purged of vapor to remove any potential hazard.
- (5) Cargo tanks transporting Class IIIB combustible liquids shall be exempt from the provisions of 527 CMR 8.05(1) through (4)

8.06: Marking and Placarding of Portable Tanks

- (1) Every portable tank used for the transportation of any combustible liquid shall be marked with letters or numerals in accordance with 527 CMR 8.05 on each side and each end, if the tank has a capacity of 1000 gallons or more, or on two opposing sides if the tank has a capacity of less than 1000 gallons.
- (2) If the markings required by 527 CMR 8.05(1) are not visible, the transport vehicle or freight container used to transport a portable tank must be marked on each side and each end in accordance with 527 CMR 8.05.
- (3) A portable tank marked with the name or identification number of a hazardous material may not be used to transport any other material unless the marking is removed, or changed to identify the material in the portable tank, whichever is appropriate.
- (4) Each portable tank which is required to be marked or placarded in accordance with 527 CMR 8.06 must remain marked and placarded when empty unless it is:
 - (a) Reloaded with a material not subject to 527 CMR 8.00; or
 - (b) Sufficiently cleaned of residue and purged of vapor to remove any potential hazard.

8.07: Cargo Tanks

(1) Cargo tanks with frames not made integral with the tanks as by welding, shall be provided with restraining devices to eliminate any relative motion between the tank and frame which may result from the stopping, starting or turning of the vehicle. Such restraining devices shall be readily accessible for inspection and maintenance; except insulation and jacketing may cover the restraining devices for insulated cargo tanks.

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.07: continued

- (2) Any cargo tank designed and constructed so that it constitutes in whole or in part the structural member used in lieu of a frame, shall be supported in such a manner that the resulting stress levels in the cargo tank do not exceed 20% of the minimum ultimate strength of the material used in construction, except when ASME Code pressure vessel design requirements apply.
- (3) Cargo tanks shall be securely fastened to the chassis or other running gear.
- (4) Tanks, piping, and connections shall be constructed of suitable materials and in accordance with good engineering practice. The U.S. Department of Transportation (DOT) standards for materials and construction and the National Fire Protection Association (NFPA) recommended standards for materials and construction are considered by the Board as conforming to good engineering practice.
- (5) Cargo tanks of 500 gallons capacity or less shall be constructed of not less than 12 USS gauge standard open hearth steel tank plate and otherwise constructed to withstand any additional stress to which they may reasonably be subjected.

8.08: Double Bulkheads

(1) Cargo tanks designed to transport different commodities which if combined during transit will cause a dangerous condition or evolution of heat or gas shall be provided with compartments separated by an air space. This air space shall be vented and be equipped with drainage facilities which shall be kept operative at all times.

8.09: Accident Damage Protection

- (1) Each cargo tank shall be provided with a rear bumper or device to protect the tank and piping in the event of a rear end collision and to reduce the likelihood of damage which could result in the loss of product. The rear bumper or device shall:
 - (a) Extend at least four inches below the lower surface of any valve, fitting, or piping at the rear of the tank:
 - (b) Be located so that the clearance between the effective bottom of the bumper or device and the ground shall not exceed 30" with the vehicle empty;
 - (c) If more than one bumper or device is used the distance between the closest points shall not exceed 24":
 - (d) Be located so that the widest part of the motor vehicle at the rear shall not extend more than 18" beyond the outermost ends of the bumper, device or devices (if separated) on either side of the vehicle:
 - (e) Be substantially constructed and firmly attached to the vehicle frame.

8.10: Closures for Manholes

(1) Each compartment shall be accessible through a 15-inch minimum inside diameter manhole. The manhole cover shall be designed to provide a secure closure of the manhole. All joints between manhole covers and their seats shall be made tight against leakage of vapor and liquid. Gaskets, if used, shall be of suitable material not subject to attack by the product.

8.11: Outlets

- (1) Bottom outlet product discharge piping shall be provided with protection in such a manner as to reasonably assure against the accidental escape of the product. Such protection must be provided by:
 - (a) A shear section located outboard of each valve seat and within four inches of the vessel which will break under strain and leave the valve seat and its attachment to the vessel and the valve head intact and capable of retaining the product. The shear section shall be machined in such a manner as to abruptly reduce the wall thickness of the adjacent piping (or valve) material by at least 20% or

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.11: continued

(b) Suitable guards capable of absorbing a concentrated horizontal force of at least 8,000 pounds applied from any horizontal direction, without damage to the discharge piping which will adversely affect the product retention integrity of the discharge valve.

The provisions of 527 CMR 8.11(1) shall be met by retrofitting cargo tanks transporting combustible liquids covered by 527 CMR 8.00 as follows:

30% of cargo tank fleet not meeting these provisions by August 31, 1994;

60% of cargo tank fleet not meeting these provisions by August 31,1996;

100% of cargo tank fleet not meeting these provisions by August 31, 1998;

- (2) Internal valves in product discharge piping shall be kept in working order and shall be closed while the vehicle is in transit.
- (3) Product discharge piping and appurtenances shall be located not less than 12" above the road.
- (4) All draw-off valves or faucets of cargo tanks on tank vehicles shall be so designed that a tight hose connection can be made thereto and shall be adequately protected against injury.
- (5) A delivery hose, when attached to a tank vehicle, shall be considered as being part of the tank vehicle.
- (6) Draw-off valves on tank vehicles shall be self-closing and, when opened for the purpose of discharging liquid, such valves shall be held open manually except where a tight hose connection is made to the inlet of the receiving container.

8.12: Static Protection

- (1) Cargo tanks and vehicle chassis shall be electrically bonded. No chain or other metal attached to a tank vehicle shall be permitted to drag upon the ground.
- (2) Provision shall be made in the tank structure of the vehicle for the bonding of the vehicle to the fill pipe during truck-loading operations.

8.13: Lighting

No lighting device other than electric lights shall be used on tank vehicles. Lighting circuits shall have suitable over-current protection (fuses or automatic circuit breakers). The wiring shall have current carrying capacity and mechanical strength, and shall be secured, insulated, and protected against physical damage, in keeping with recognized good practice.

8.14: Exhaust System

- (1) The exhaust system, including muffler and exhaust line shall have ample clearance from the fuel system and combustible materials, and shall not be exposed to leakage or spillage of the product or accumulations of grease, oil or gasoline.
- (2) The exhaust system, including all units, shall be constructed and installed in a workmanlike manner.

8.15: Fire Extinguishers

Each tank vehicle shall be equipped and maintained with one or more hand fire extinguishers of combined 2A, 20-B, C rating. Ratings shall be in accordance with the Standard for the Installation of Portable Fire Extinguishers, NFPA No. 10. Fire extinguishers shall be kept in good operating condition at all times, and they shall be located in an accessible place on each tank vehicle.

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.16: Auxiliary Internal Combustion Engines

Internal combustion engines, other than those providing propulsive power, installed or carried upon a tank vehicle transporting combustible liquids for the purpose of providing power for the operation of pumps or other devices, shall meet the following requirements:

- (1) The engine air intake shall be equipped with an effective flame arrester, or an air cleaner having effective flame arrester characteristics, substantially installed and capable of preventing emission of flame from the intake side of the engine in the event of backfiring.
- (2) The fuel system shall be so located or constructed as to minimize the fire hazard. If the fuel tank is located above or immediately adjacent to the engine, suitable shielding shall be provided to prevent spillage during the filling operation or leakage from the tank or fuel system from coming in contact with the engine or any parts of the ignition and exhaust systems. All parts of the fuel system shall be constructed and installed in a workmanlike manner.
- (3) Pumps and other appurtenances carrying or containing combustible liquids shall be so located in relation to the engine that spillage or leakage from such parts shall be prevented from coming in contact with the engine or any parts of the ignition and exhaust system, or adequate shielding shall be provided to attain the same purpose. The engine cooling fan shall be so positioned, rotated or shielded as to minimize the possibility of drawing flammable vapors toward the engine.
- (4) When the engine is located in a position where spillage from the cargo tank or its appurtenances or from side racks might constitute a hazard, suitable shielding shall be provided to prevent such spillage from contacting the engine or engine exhaust system and for draining such spillage away from the vicinity of the engine.
- (5) Where the engine is carried within an enclosed space, adequate provision shall be made for air circulation at all times to prevent accumulation of flammable vapors and to avoid overheating.
- (6) The exhaust system shall be substantially constructed and installed and free from leaks. The exhaust line and muffler shall have adequate clearance from combustible materials and the exhaust gases shall be discharged at a location which will not constitute a hazard. When engines are carried as in 527 CMR 8.16(1)(e), the exhaust gases shall be discharged outside of each such enclosed space.
- (7) The ignition wiring shall be substantially installed with firm connections and spark plug and all other terminals shall be suitably insulated to prevent sparking in the event of contact with conductive materials. The ignition switch shall be of the enclosed type.

8.17: Auxiliary Electric Generators and Motors

Electrical equipment installed or carried upon a tank vehicle transporting combustible liquids for the operation of pumps or other devices used for the handling of product and operating product handling accessories shall meet the following requirements:

- (1) Electric generators driven from a power-take-off connected to the vehicle transmission or to an auxiliary transmission, or by an auxiliary internal combustion engine, shall be of the explosion-proof type.
- (2) Electric motors shall be of the explosion-proof type.
- (3) Wiring shall be adequate and substantially installed with all terminals firmly connected and insulated to prevent sparking from vibration or in the event of contact with conductive materials. Wires shall have oil-proof insulation. If overload protection is provided, it shall be of the explosion-proof type. All switches or other sparking devices shall be of the explosion-proof type and all conduit entrances shall be sealed.

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.17: continued

- (4) Where the generator or motor is located within an enclosed space adequate provision shall be made for air circulation to prevent overheating and possible accumulation of flammable vapors.
- (5) Electrical equipment and wiring shall be so located as to prevent contact with spillage from cargo tank or side racks or suitable shielding shall be provided to attain equivalent protection.

8.18: Filling and Discharging Tank Vehicles

- (1) The driver, operator or attendant of any tank vehicle shall not leave the vehicle while it is being filled or discharged.
- (2) The cargo tank shall be bonded to the grounded fill pipe when loading. The bond-wire connection shall be made prior to opening the dome covers. It shall be maintained in place during the entire filling operation and the dome covers shall be securely closed before the bond-wire is disconnected from the cargo tank.
- (3) No cargo tank or compartment thereof used for the transportation of any flammable or combustible liquid shall be loaded liquid full. The vacant space (outage) in a cargo tank or compartment thereof used in the transportation of flammable or combustible liquids shall be not less than 1%; sufficient space (outage) shall be left vacant in every case to prevent leakage from or distortion of such tank or compartment by expansion of the contents due to rise in temperature in transit.
- (4) The driver, operator or attendant of any tank vehicle shall be trained in the proper method of loading and unloading of tank vehicles. No storage tank shall be filled until the delivery operator has determined tank ullage (available capacity) to prevent overfilling.

8.19: Asphalt Tank Vehicles

- (1) The outlets of each cargo tank used for the transportation of liquids having a viscosity equal to or greater than 45 seconds Saybolt Universal at 100°F. shall be equipped with a suitable shutoff valve, located internally and designed so that the valve will remain operable if the external connection is sheared off, or shall be equipped with a front or rear-head mounted valve securely reinforced and protected against shock or road hazards.
- (2) Each cargo tank used in asphalt service shall be provided with a vent having an effective opening at least equivalent to a nominal two-inch pipe.
- (3) Overflow protection for asphalt tank vehicles shall be provided in the form of reservoirs or flashing around fill and vent pipes. Overflow and drain pipes shall have thicknesses heavier than the tank shell and shall be designed so that hot asphalt will not spill onto tires, brakes, burner equipment or the vehicle's exhaust system.
- (4) Cargo tanks shall be free of all water before they are loaded with hot asphalt.
- (5) Burner tubes shall be properly installed and maintained.
- (6) The bottom of internal burner tubes shall be located as low in the tank as proper design and functioning will permit.
- (7) Instructions for the proper method of operating the burner equipment and the pumping equipment, if so equipped, shall be provided. These instructions shall accompany the vehicle at all times.
- (8) A legible red warning sign shall be permanently attached near the burners on any tank vehicle equipped with burners and shall contain at least the following information:

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.19: continued

"WARNING

This burner equipment must not be operated while the vehicle is being loaded or is in transit, or when the burner tubes are not completely submerged."

8.20: Transportation by Transfer Tanks

Vehicles other than approved tank vehicles may transport combustible liquids in transfer tanks provided that an application has been made and a permit to transport has been issued in accordance with 527 CMR 8.04. The vehicle shall be approved for the transportation of the combustible liquid provided that:

- (1) The tank is securely mounted to the vehicle body or truck bed and its capacity does not exceed 119 gallons;
- (2) The tank shall be constructed of not less than 14 USS gauge standard open hearth steel tank plate or C inch aluminum and otherwise constructed to withstand any additional stress to which it may reasonably be subjected;
- (3) The liquid is drawn only from the top of the tank by means of a suitable pump to which is attached a durable hose equipped with a self-closing nozzle.
- (4) All openings in the tank are secured by plugs or caps maintained wrench tight while the vehicle is in transit.
- (5) The vehicle is equipped with a fire extinguisher having a rating of at least 1A, 10B, C.

8.21: General

- (1) No cargo tank, portable tank or transfer tank shall be mounted in the bed or body of any vehicle which contains a hoist to raise such bed or body.
- (2) Tank vehicles shall not be operated unless they are in proper repair, devoid of accumulations of grease, oil, or other combustibles, and free of leaks.
- (3) Smoking by tank vehicle drivers, helpers, repairmen, or other personnel is prohibited while they are driving, making deliveries, filling, or making any repairs to tank vehicles.
- (4) No cargo tank vehicle loaded with flammable or combustible liquids as defined in 527 CMR 8.00 shall be left unattended for over one hour unless the driver notifies the head of the fire department in the city or town in which the vehicle is parked. The head of the fire department may assume control of the vehicle and its contents if the owner is unable or unwilling to remove the vehicle or its contents within a reasonable time.
- (5) Any flammable or combustible liquid transported by other than cargo tank, portable tank or transfer tank shall be transported in approved containers, substantial metal drums or other similar containers, with all openings tightly closed, and in an upright and secured postition. Gasoline or other flammable petroleum product may be transported without a permit in any open vehicle or in a compartment of a closed vehicle separated from the passengers, in total quantity not to exceed 21 gallons, provided such flammable liquid is contained in approved containers with no individual container exceeding seven gallons capacity. Combustible liquids may be transported without a permit in any open vehicle or in the compartment of a closed vehicle separated from the passengers, in total quantity not to exceed 55 gallons, provided such combustible liquid is contained in approved containers, substantial metal drums or other similar containers. Approved containers shall include those built to DOT standards, listed and labeled by a NRTL, or approved by the State Fire Marshal.
- (6) All containers of one quart capacity or more, used in accordance with the provisions of 8.21(5), shall bear a label with the words "DANGER KEEP AWAY FROM FIRE" or similar wording, in letters not less than $\frac{1}{2}$ inch in height.

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

8.21: continued

- (7) No person shall sell, offer for sale, advertise for sale, give, lease, or otherwise transfer for consideration or without consideration any container that has not been approved for the keeping, storage, use, handling, transportation or other disposition of flammable or combustible liquids. Approved containers shall include those built to DOT standards, listed and labeled by a NRTL, or approved by the State Fire Marshal.
- (8) In accordance with the provisions of M.G.L. c. 148, § 9, the Board hereby prescribes, as the maximum amount, 15,000 gallons of flammable liquid in the aggregate which may be stored unattended within cargo tanks, portable tanks or transfer tanks on a parcel of land without a license or registration or either of them, provided a permit has been obtained therefore. 527 CMR 8.21(8) shall not apply to parcels of land permitted by the head of the fire department prior to September 1, 2008.
- (9) In accordance with the provisions of M.G.L. c. 148, § 9, the Board hereby prescribes, as the maximum amount, 15,000 gallons of Class II combustible liquid in the aggregate which may be stored unattended within cargo tanks, portable tanks or transfer tanks on a parcel of land without a license or registration or either of them, provided a permit has been obtained therefore. 527 CMR 8.21(9) shall not apply to parcels of land permitted by the head of the fire department prior to September 1, 2008.
- (10) The head of the fire department may limit the quantity of flammable and combustible liquids, that may be stored unattended, on a parcel of land, to less than those amounts specified in 572 CMR 8.21(8) and 8.21(9), under the authority of a permit where, in his opinion, conditions are such to warrant his restricting such amounts.
- (11) Whoever violates the provisions of 527 CMR 8.00 shall be subject to the penalties stated in M.G.L. c. 148, § 15.

8.22: Referenced Publications

Documents or portions thereof that are referenced within 527 CMR 8.00 shall be considered a part of the requirements of 527 CMR 8.00. Refer to 527 CMR 49.00 for a complete listing of all documents referenced in 527 CMR.

REGULATORY AUTHORITY

527 CMR 8.00: M.G.L. c. 148, §§ 9, 10 and 28; c. 22D, § 4.